1: Cytokines Cell Mol Ther 1998 Dec;4(4):229-41

Interferons in the management of viral hepatitis.

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Since their discovery in 1957, interferons (IFNs) have been noted to have protective effects against human viral infections. The use and safety of IFNs in patients with acute or chronic hepatitis B or C infections have evolved over the last 20 years. The most studied IFN for the management of viral hepatitis is IFN-alpha, but others have recently been evaluated through controlled clinical trials. IFN treatment is not currently indicated for patients with acute hepatitis B, but has proven beneficial in chronic hepatitis B. The success of treatment in this group of patients has been measured by the normalization of liver enzymes, loss of hepatitis B e antigen and loss of detectable serum DNA of hepatitis B. It has been estimated in several clinical trials that as many as 40% of treated patients will respond to therapy, as defined above. Although only a few and limited studies have evaluated the use of IFNs in acute hepatitis C, treatment appears to decrease the likelihood of chronicity, and should be considered. In chronic hepatitis C, treatment has been effective in achieving sustained viral eradication in up to 20% of patients taking the FDA-approved dosage of three million units, three times weekly for 6-12 months. However, higher doses, longer duration of treatment or combining IFN with other antiviral agents may improve the rate of response. It has become clear during the last two decades that IFNs have beneficial effects for patients with viral hepatitis B or C. Much more effort is needed to establish the optimal dose and duration of therapy. Studies addressing the pharmacokinetics of IFNs in patients with viral hepatitis are needed, and methods to improve the bioavailability of these products to affected tissues such as the liver may improve efficacy and minimize side-effects.

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